

Amendments to the Claims

1 Claim 1 (currently amended): A computer-implemented method of programmatically building
2 queries, comprising: ~~programmatically building a query user interface for building to build a~~
3 query command to query content of a Web page, wherein the Web page ~~[[that]] lacks an already-~~
4 ~~existing a~~ query user interface, comprising:

5 programmatically determining a current context of a user of a device on which the Web
6 page is rendered, the current context comprising at least one of: an identification of the user; a
7 role of the user; the device used by the user; and a geographical location of the user; ~~and~~
8 ~~preferences of the user;~~

9 programmatically determining a plurality of content values specified in the Web page;
10 programmatically determining, based on the specified content values, a plurality of content
11 types corresponding thereto;

12 using the programmatically-determined current context and at least one of the
13 programmatically-determined content types to consult a lookup component~~[[,]]~~ which obtains
14 ~~thereby obtaining~~ at least two query parameter names ~~for displaying to display~~ on the
15 programmatically-built query user interface;

16 programmatically identifying, for each of the obtained query parameter names, at least one
17 selectable query qualifier corresponding thereto, wherein each of the selectable query qualifiers
18 indicates a particular comparison to be performed ~~[[if]]~~ when subsequently comparing selected
19 ones of the content values to that query parameter name;

20 programmatically identifying, for each of the obtained query parameter names, at least one
21 selectable parameter value corresponding thereto;

programmatically building a plurality of query parameters by associating, with each of the obtained query parameter names, each of the at least one programmatically-identified selectable query qualifiers corresponding thereto and each of the at least one programmatically-identified selectable parameter values corresponding thereto; [[and]]

displaying on the query user interface, for each of the programmatically-built query parameters, the obtained query parameter name, a first selector for selecting one of the at least one query qualifiers associated therewith and a second selector for selecting at least one of the at least one parameter values associated therewith; and

accepting input from the user to build the query command to query the Web page, further comprising:

accepting, from the user for each of the displayed query parameter names, one of the associated query qualifiers selected by the user with the first selector and at least one of the associated parameter values selected by the user with the second selector; and

programmatically building the query command to specify, for each of the displayed query parameter names, the selected query qualifier and each of the at least one selected parameter values.

Claims 2 - 3 (canceled)

Claim 4 (previously presented): The method according to Claim 1, further comprising:

programmatically identifying at least one query extension parameter for the query command, responsive to a request from the user, further comprising:

4 using the programmatically-determined current context and at least one of the
5 obtained query parameter names to consult a mapping, thereby obtaining a related query
6 parameter name;
7 programmatically identifying at least one selectable query qualifier corresponding
8 to the obtained related query parameter name, wherein each of the selectable query qualifiers
9 indicates a particular comparison to be performed if subsequently comparing selected ones of the
10 content values to the obtained related query parameter name;
11 programmatically identifying at least one selectable parameter value corresponding
12 to the obtained related query parameter name; and
13 programmatically building the query extension parameter by associating, with the
14 obtained related query parameter name, the programmatically-identified at least one selectable
15 query qualifier corresponding thereto and each of the at least one programmatically-identified
16 selectable parameter values corresponding thereto; and
17 wherein the displaying further comprises also displaying the programmatically-built query
18 extension parameter for each of the at least one programmatically-identified query extension
19 parameters as additional ones of the programmatically-built query parameters.

Claims 5 - 25 (canceled)

1 Claim 26 (new): The method according to Claim 1, further comprising:

2 programmatically determining preferences of the user; and

3 wherein the using the programmatically-determined current context and at least one of the

programmatically-determined content types further comprises using the programmatically-determined preferences of the user to consult the lookup component.

Claim 27 (new): A computer-implemented system configured to programmatically build a query user interface to build a query command to query content of a Web page, wherein the Web page lacks a query user interface, comprising:

a computer comprising a processor; and

instructions which execute using the processor to implement functions comprising:

programmatically determining a current context of a user of a device on which the Web page is rendered, the current context comprising at least one of: an identification of the user; a role of the user; the device used by the user; and a geographical location of the user;

programmatically determining a plurality of content values specified in the Web page;

programmatically determining, based on the specified content values, a plurality of content types corresponding thereto;

using the programmatically-determined current context and at least one of the programmatically-determined content types to consult a lookup component which obtains at least two query parameter names to display on the programmatically-built query user interface;

programmatically identifying, for each of the obtained query parameter names, at least one selectable query qualifier corresponding thereto, wherein each of the selectable query qualifiers indicates a particular comparison to be performed when subsequently comparing selected ones of the content values to that query parameter name;

programmatically identifying, for each of the obtained query parameter names, at least one selectable parameter value corresponding thereto;

programmatically building a plurality of query parameters by associating, with each of the obtained query parameter names, each of the at least one programmatically-identified selectable query qualifiers corresponding thereto and each of the at least one programmatically-identified selectable parameter values corresponding thereto;

displaying on the query user interface, for each of the programmatically-built query parameters, the obtained query parameter name, a first selector for selecting one of the at least one query qualifiers associated therewith and a second selector for selecting at least one of the at least one parameter values associated therewith; and

accepting input from the user to build the query command to query the Web page, further comprising:

accepting, from the user for each of the displayed query parameter names, one of the associated query qualifiers selected by the user with the first selector and at least one of the associated parameter values selected by the user with the second selector; and

programmatically building the query command to specify, for each of the displayed query parameter names, the selected query qualifier and each of the at least one selected parameter values.

Claim 28 (new): A computer program product configured to programmatically build a query user interface to build a query command to query content of a Web page, wherein the Web page lacks a query user interface, the computer program product embodied on one or more computer-

4 readable storage media and comprising computer-readable program code for:

5 programmatically determining a current context of a user of a device on which the Web
6 page is rendered, the current context comprising at least one of: an identification of the user; a
7 role of the user; the device used by the user; and a geographical location of the user;

8 programmatically determining a plurality of content values specified in the Web page;

9 programmatically determining, based on the specified content values, a plurality of content
10 types corresponding thereto;

11 using the programmatically-determined current context and at least one of the
12 programmatically-determined content types to consult a lookup component which obtains at least
13 two query parameter names to display on the programmatically-built query user interface;

14 programmatically identifying, for each of the obtained query parameter names, at least one
15 selectable query qualifier corresponding thereto, wherein each of the selectable query qualifiers
16 indicates a particular comparison to be performed when subsequently comparing selected ones of
17 the content values to that query parameter name;

18 programmatically identifying, for each of the obtained query parameter names, at least one
19 selectable parameter value corresponding thereto;

20 programmatically building a plurality of query parameters by associating, with each of the
21 obtained query parameter names, each of the at least one programmatically-identified selectable
22 query qualifiers corresponding thereto and each of the at least one programmatically-identified
23 selectable parameter values corresponding thereto;

24 displaying on the query user interface, for each of the programmatically-built query
25 parameters, the obtained query parameter name, a first selector for selecting one of the at least

one query qualifiers associated therewith and a second selector for selecting at least one of the at least one parameter values associated therewith; and

accepting input from the user to build the query command to query the Web page, further comprising:

accepting, from the user for each of the displayed query parameter names, one of the associated query qualifiers selected by the user with the first selector and at least one of the associated parameter values selected by the user with the second selector; and

programmatically building the query command to specify, for each of the displayed query parameter names, the selected query qualifier and each of the at least one selected parameter values.